

Class : XIth
Date :

Subject : BIOLOGY
DPP No. : 1

Topic :- Respiration in Plants

- Beer and butter milk are products of fermentation by
 - Rhizopus stolonifer*
 - Caedobacter taeniospiralis*
 - Bacillus subtilis*
 - Saccharomyces cerevisiae*
- Apparatus to measure rate of respiration and respiratory quotient is
 - Auxanometer
 - Potometer
 - Respirometer
 - Manometer
- Acetyl Co-A binds to oxaloacetic acid to form
 - Formaldehyde
 - Citrate
 - Acetate
 - Isocitrate
- In fermentation NADH is oxidised to NAD⁺ in rate
 - Fast
 - Slow
 - Usual
 - None of these
- Last electron acceptor in respiration is
 - Oxygen
 - Hydrogen
 - Carbon dioxide
 - NADH
- In animal cells, like muscle, during exercise when O₂ is inadequate for cellular respiration, pyruvic acid is reduced into lactic acid by
 - O₂
 - Carboxylation
 - Lactate dehydrogenase
 - None of the above
- Glucose break down takes place in fermentation
 - Partially
 - Completely
 - According to substrate
 - None of these
- Plants need one of the following for ATP formation
 - N and P
 - N and Cu
 - N and Ca
 - K
- First vitamin to be produced through fermentation process using a wild bacterium was
 - Vitamin-D
 - Vitamin-C
 - Vitamin- B₁₂
 - Vitamin-B₂
- Fate of pyruvic acid during aerobic respiration is
 - Lactic acid fermentation
 - Alcoholic acid fermentation
 - Oxidative decarboxylation
 - Oxidative phosphorylation

11. In respiration, respiratory substances can be used
 a) Carbohydrate b) Protein c) Organic acid d) All of these
12. In oxidative decarboxylation, only a carbon molecule of pyruvic acid is get oxidised, other two carbon molecule goes to form
 a) Acetyl Co-A b) CO₂ c) Citric acid d) Both (a) and (b)
13. Enzymes of electron transport system are present in
 a) Inner mitochondrial membrane b) Matrix
 c) Intermembranous space d) Endoplasmic reticulum
14. Fungi are dependent on dead and decaying matter for feeding, it is called
 a) Saprophytes b) Halophytes c) Xerophytes d) Nanophytes
15. Which of the following reaction does not take place in the cell organelle, that is referred to as 'Power house of the cell'?
- | | |
|----------------------------|-----------------------------------------------|
| a) Glycine Decarboxylation | b) Glyceraldehyde 3-phosphate dehydrogenation |
| c) Fumaric acid hydration | d) Cytochrome oxidation |
16. Which of the following is true regarding glycolysis?
 I. Takes place in cytosol
 II. Produces no ATP
 III. Has no connection with electron transport chain
 IV. Reduces two molecules of NAD⁺ for every glucose molecule processed
 Choose the correct option
- | | | | |
|-----------|------------------|-------------|------------------|
| a) Only I | b) I, II and III | c) I and II | d) None of these |
|-----------|------------------|-------------|------------------|
17. The reaction which is catalysed by a protein that is not found in the matrix of mitochondria is
 a) Conversion of pyruvic acid to acetyl coenzyme-A b) Oxidative Decarboxylation of α-ketoglutaric acid
 c) Oxidation of Succinic acid d) Cleavage of Succinyl coenzyme-A
18. All enzymes of TCA cycle are located in the mitochondrial matrix except one, which is located in inner mitochondrial membranes in eukaryotes and in cytosol in prokaryotes. This enzyme is
 a) Lactate Dehydrogenase b) Isocitrate Dehydrogenase
 c) Malate Dehydrogenase d) Succinate Dehydrogenase
19. Identify enzyme A in the given reaction of Kreb's cycle

$$\text{OAA} + \text{Acetyl Co} - \text{A} + \text{H}_2\text{O} \xrightarrow{\text{A}} \text{Citric acid} + \text{Co} - \text{A}$$

 a) Oxaloacetate synthetase b) Citrate synthetase
 c) Aconitase d) Dehydrogenase

20. The enzymes for TCA cycle are present in

a) Plastids

c) Mitochondria

b) Golgi complex

d) Endoplasmic reticulum

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